

#31/203

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of)
• •) For: Method and Apparatus for Providing
Krishnamurthi et al.) an Alert with Information Signal
) Between a Mobile Switching
Serial No. 08/863,457) Center and a Base Station
Filed: May 27, 1997)) Group Art Unit: 2682

PETITION TO THE COMMISSIONER TO WITHDRAWAL ABANDONMENT UNDER 37_C.F.R. § 1.181(a) PECEIVED Technology Center 2800

BOX DAC Assistant Commissioner for Patents Washington, D.C. 20231

Attn:

Steven H.D. Nguyen, Examiner

Dear Sir:

The following petition is being submitted in response to a Notice of Abandonment for the patent application identified above which was mailed by the United States Patent and Trademark Office (PTO) on December 17, 2002.

Applicants received a final Office Action in the above-identified application which was mailed on November 5, 2001. Applicants filed an Amendment with a Request for Continued Examination in duplicate on January 15, 2002.

> I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Asst. Commissioner of Patents, Washington, D.C. 20231, on:

> > January 21, 2003

(Date of Deposit) Sheryl L. Schoen

(Name of the Person Making Deposit)

(Bignature)

January 21, 2003

(Date of Signature)

Applicants received the return postcard which was date stamped by the PTO on February 4, 2002. A copy of the appropriate response, return postcard, and stamped returned postcard from the Patent Office is enclosed.

Applicants believe this Notice of Abandonment has been entered in error. Applicants filed a response in a timely manner, and are therefore requesting withdrawal of the abandonment.

Should the Examiner have any questions regarding this petition he is to contact the Attorney for Applicants.

Respectfully submitted,

Dated:

January 21, 2003

S. Hossain Beladi

Attorney for Applicants Registration No. 42,311

QUALCOMM Incorporated 5775 Morehouse Drive San Diego, California 92121 Telephone: (858) 658-3072

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(858) 658-3072 (858) 658-2502



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application No. 08/863,457 KRISHNAMURTHI, ET AL.) For:))	METHOD AND APPARATUS FOR PROVIDING AN ALERT WITH INFORMATION SIGNAL BETWEEN A MOBILE SWITCHING CENTER AND A
		BASE STATION
Filed: May 27, 1997) Group No.	2664

RESPONSE TO OFFICE ACTION AF

Assistant Commissioner of Patents BOX RCE Washington, D.C. 20231

Attention: Steven Nguyen, Examiner

Dear Assistant Commissioner:

In response to the Final Office Action dated November 5, 2001, please amend the above-identified application as indicated below.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231, on:

01/15/2002
(Date of Deposit)

Carola Emelius-Swartz

(Name of the Person Making Deposit)

01/15/2002 (Date of Signature)

(Signature)

Attorney Docket No.: PA377CIPA2

PENDING CLAIMS AS AMENDED

Please amend claims 1, 6 and 11 as indicated below. A marked up version of the amended claims is attached as Appendix A.

- (Twice Amended) A CDMA cellular telecommunications messaging
 system, comprising:
- a message generator in a mobile switching center for generating an IS-634

 4 message signal, said message signal for transmission to a base station for triggering said base station to transmit a subsequent message signal to a mobile
- 6 station; and

8

- a message receiver in said base station for receiving said message signal;
- wherein said message signal is generated upon detection by said mobile switching center of a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber.
- 6. (Twice Amended) A CDMA cellular communication system, 2 comprising:
 - a mobile station:
- a base station in communication with said mobile station via an Air-Interface, said base station defining a first cellular coverage area;
- 6 a mobile switching center in communication with said base station via an IS-634 A-Interface:
 - a message generator at said mobile switching center for generating a message signal for transmission to said first base station on said A-Interface; and
- a message receiver at said base station for receiving said message signal, wherein upon receipt of said message signal, said first base station transmits a subsequent message signal to said mobile station on said Air-Interface;
- wherein said message generator generates said message signal when said
 mobile switching center detects a condition whereby a mobile subscriber attempts
 to originate a call while another party is attempting to call the same mobile
 subscriber.

Attorney Docket No.: PA377CIPA2

- 11. (Twice Amended) In a CDMA wireless communication system, a
 2 method for messaging between a mobile switching center and a base station, comprising the steps of:
- detecting the occurrence of a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber;

generating a message signal in said mobile switching center based on a positive result of said step of detecting; and

transmitting said message signal to said base station on an IS-634 A-10 Interface, wherein upon receipt of said message signal, said base station transmits a subsequent message signal to a mobile station on an Air-Interface.

Attorney Docket No.: PA377CIPA2

REMARKS

Claims 1-17 are in this Application. Applicants have amended independent claims 1, 6 and 11 in order to clarify claim scope. No new matter has been added. In the Office Action mailed on September 5, 2001, the Examiner rejected claims 1-3, 6, 8, 9, and 11-13 under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent No. 5,878,036, filed December 20, 1995, and issued to Spartz et al. (Spartz) in view of U.S. Patent No. 5,822,420, filed August 30, 1996, and issued to Bolon et al. (Bolon). The Examiner also rejected claims 4-5, 7, 10 and 14 under 35 U.S.C. § 103(a) as being anticipated by Spatz and Bolon as applied to claims 1, 6, and 11 and further in view of U.S. Patent No. 5,633,868, filed October 17, 1994, and issued to Baldwin et al. (Baldwin). The Applicants respectfully traverse the Examiner's rejections.

35 U.S.C. §103(a): Spartz. in view of Bolon

The Examiner rejected claims 1-3, 6, 8, 9, and 11-13 under 35 U.S.C. § 103(a) as being unpatentable over Spartz in view of Bolon. Applicants respectfully disagree. The pertinent independent claims are claims 1, 6 and 11.

The Examiner states that "Bolon discloses a method of detecting the occurrence whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center for transmitting to the mobile subscriber via base station." (Detailed Action, Item 2). Bolon does not disclose Applicants' claimed invention in Column 3, lines 3-15 as cited by the Examiner. Column 3, lines 3-15 disclose a condition whereby a Customer Premises Equipment (CPE), which is a not a mobile device adhering to an A-Interface standard, places an outgoing call when a Network Interface Unit (NIU), unrelated to a base station in a wireless communication system adhering to IS-634 interface standards with a mobile station, is sending the CPE an incoming call, or a condition whereby a NIU places

Attorney Docket No.: PA377CIPA2

an incoming call to the CPE when a Radio Base Unit (RBU) is sending the CPE and outgoing call. The conditions disclosed by Bolon are switching conflicts in a Digital Loop Carrier (DLC). Resolution of switching conflicts in DLCs do not address the IS-634 requirements of a Base Station Controller or a Mobile Switching Center in a wireless cellular communications system. Resolution of switching conflicts in DLCs do not overcome deficiencies in IS-634 communications between baste stations and mobile switching centers of CDMA systems that prevent a mobile from receiving a call when a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber. The protocol taught by Bolon to resolve switching conflicts in DLCs cannot be applied to the endpoints of a CDMA system to enable a mobile to receive a call when a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber. The Examiner himself concedes that "Spartz fails to disclose a step of detecting the occurrence of a condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same subscriber..."

In view of the above-discussed insufficiencies of *Bolon* and *Spartz* to render Applicants' invention obvious, it is respectfully requested that the section 103 rejections of claims 1-3, 6, 8, 9, and 11-13 be withdrawn.

35 U.S.C. §103(a): Spartz. in view of Bolon and Baldwin

The Examiner rejected claims 4-5, 7, 10, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Spartz in view of Bolon. Applicants respectfully disagree. The pertinent independent claims are claims 1, 6 and 11.

The Examiner states that "Baldwin discloses transmitting Alert With Information Message Signals between a wireless gateway and a subsystem of a CDMA wireless network." (Detailed Action, Item 3). Hence, the Examiner concludes that *Spartz* and *Bolon* in view of *Baldwin* render claims 4 – 5, 7, 10, and 14 unpatentable.

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IS-634 messaging signals are not used in wireless gateway communications described by Baldwin. The protocol taught by Baldwin to resolve switching conflicts in DLCs cannot be exchanged between a base station and a mobile switching center to enable a mobile to receive a call when a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber. The protocols cannot be exchanged because the signaling between the endpoints of the differing systems is unique to the systems. The like naming of a message signal by different systems does not make the content and arrangement of the signals appropriate for one system compatible to the other system. The content and arrangement of messaging signals between a Mobile Switching Center, Base Station, and Mobile Subscriber of a CDMA system required for call processing have no application in a DLC system. Likewise, the content and arrangement of messaging signals between a NIU, CPE and RBU of a DLC system have no application in CDMA system. The use of a signal arrangement for a DLC system in a CDMA system would result in the discarding of an erroneous and unusable message, and vice versa.

The Alert with Information messages used in virtual circuit management cannot be applied to enable a mobile to receive a call when a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber. The Alert with Information messages appropriate for virtual circuit management in a DLC system would not contain parameters usable foro call processing in a CDMA system, and the sequencing of the message would not apply either. Furthermore, the arrangement of the claimed IS-634 signals has a distinct purpose different from the arrangement of the signals disclosed in Spartz, Bolon and Baldwin. The distinct purpose of the content and arrangement of the claimed IS-634 signals is for call processing in a CDMA system. Applicant respectfully submits that a new arrangement of old signals with a distinct purpose different from the purposes disclosed in Spartz, Bolon, and Baldwin is patentable over the cited art. As previously discussed with respect to Spartz and Bolon Applicants assert that the addition of the Baldwin reference fails to teach or suggest Applicants' claimed invention utilizing IS-634 messaging signals.

Attorney Docket No.: PA377CIPA2

In view of the further described insufficiencies of the *Spartz* and *Bolon* references in combination with the *Baldwin* reference to render Applicants' invention obvious, it is respectfully requested that the section 103 rejection of claims 4-5, 7, 20, and 14, be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 01/15/2002	Dated:	01/15/2002	
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By: Maryanne E. DeAngelo

Agent for Applicants
Registration No. 47,228

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APPENDIX A

1. ([Once] <u>Twice</u> Amended) A <u>CDMA</u> cellular telecommunications messaging system, comprising:

a message generator in a mobile switching center for generating an IS-634 message signal, said message signal for transmission to a base station for triggering said base station to transmit a subsequent message signal to a mobile station; and

a message receiver in said base station for receiving said message signal;

wherein said message signal is generated upon detection by said mobile switching center of a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber.

6. ([Once] <u>Twice</u> Amended) A <u>CDMA</u> cellular communication system, comprising:

a mobile station;

a base station in communication with said mobile station via an Air-Interface, said base station defining a first cellular coverage area;

a mobile switching center in communication with said base station via an <u>IS-634</u> A-Interface;

a message generator at said mobile switching center for generating a message signal for transmission to said first base station on said A-Interface; and

a message receiver at said base station for receiving said message signal, wherein upon receipt of said message signal, said first base station transmits a subsequent message signal to said mobile station on said Air-Interface;

wherein said message generator generates said message signal when said mobile switching center detects a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber.

Attorney Docket No.: PA377CIPA2

11. ([Once] <u>Twice</u> Amended) <u>In a CDMA wireless communication</u> <u>system</u>, a method for messaging between a mobile switching center and a base station, comprising the steps of:

detecting the occurrence of a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber;

generating a message signal in said mobile switching center based on a positive result of said step of detecting; and

transmitting said message signal to said base station on an <u>IS-634</u> A-Interface, wherein upon receipt of said message signal, said base station transmits a subsequent message signal to a mobile station on an Air-Interface.

Attorney Docket No.: PA377CIPA2

BOX RCE

U.S. Department of Commerce Patent and Trademark Office

PATENT

REQUEST FOR

$\operatorname{ ilde{E}ONTINUED}$ Examination (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application Filed on or after June 8, 1995.

See The American	Inventors	Protection	Act of	1999 (AIPA).

Application Number	08/863,457
Filing Date	05/27/1997
First Named Inventor	KRISHNAMURTHI ET AL.
Group Art Unit	2664
Examiner Name	STEVEN NGUYEN
Customer Number	23696
Attorney Docket Number	PA377CIPA2

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application. NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53(d) (PTOSB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 16, 2000); Inserim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gat. Pal. Office 47 (Apr. 11, 2000), which estimated RCE practice.

—	4. Cub mission required under 27 C.F.D. 6.4.444					
١.	Submission required under 37 C.F.R. § 1.114 a. Previously submitted					
	a.	i. i	Consider the amendment(s)/reply under 37 C.F.R. § 1.1	16 previo	ously filed on	
		ii.	Consider the arguments in the Appeal Brief or Reply Brief			
		iii.	Other	•		
	b.	_	Enclosed			
			Amendment/Reply			
		ii. iii.	Affidavit(s)/Declaration(s) Information Disclosure Statement (IDS)			
		iv.	Other			
2.	Mi	scellan				
<u>-</u> .	a.		Suspension of action on the above-identified application is requ	uested u	nder 37 C.F.R. § 1.103(c)	
		•	for a period of months. (Period of suspension shall not exceed			
	L		required)			
	b.		Other			
3.	Fe	es The	RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 which the	RCE is file	ed.	
1	a.		The Director is hereby authorized to charge the following fees,			
	Deposit Account No. 17-0026					
			RCE fee required under 37 C.F.R. § 1.17(e)			
		ii.	Extension of time fee (37 C.F.R. §§ 1.136 and 1.117)			
		iii.	☐ One Month (\$110.00) ☐ Two Months (\$400.00) ☐ Three Months (\$920.00) ☐ Other			
<u> </u>		****				
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED						
Da	Date 11/15/2002 Signature Maryanne E. De anglo					
	Maryanne E. DeAngelo, Reg. No. 47,228					
1	(858) 651-2384					
CERTIFICATE OF MAILING OR TRANSMISSION						
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as						
first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on:						
	me	(Print	Carola Emelius-Swartz			
	nat	ure		Date	01/15/2002	
	<u> </u>	OMM In	ocorporated	<u> </u>	<u> </u>	

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23696

PATENT TRADEMARK OFFICE



STAMP HEREON ACKNOWLEDGES RECEIPT OF THE FOLLOWING IN THE U.S. PATENT AND TRADEMARK OFFICE (Mailed: 01/15/2002)

MDA/EME

DOCKET NO: PA377CIPA2

ENCLOSED ARE:

RCE TRANSMITTAL LETTER IN DUPLICATE; AMENDMENT AF; and POSTCARD.

APPLICANT: KRISHNAMURTHI ET AL. ASSIGNEE: QUALCOMM Incorporated

APPLICATIONNO.: 08/863,457

FILED: 05/27/1997

FOR: METHOD AND APPARATUS FOR PROVIDING AN ALERT WITH INFORMATION SIGNAL BETWEEN A MOBILE SWITCHING CENTER AND A BASE STATION

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DOCKET NO: PA377CIPA2

MDA/EME

ENCLOSED ARE:

RCE TRANSMITTAL LETTER IN DUPLICATE;

AMENDMENT AF; and POSTCARD.

APPLICANT: KRISHNAMURTHI ET AL. ASSIGNEE: QUALCOMM Incorporated

APPLICATIONNO.: 08/863,457

FILED: 05/27/1997

FOR: METHOD AND APPARATUS FOR PROVIDING AN ALERT WITH INFORMATION SIGNAL BETWEEN A MOBILE SWITCHING CENTER AND

A BASE STATION

STAMP HERE SHOWING RECEIPT (THANK YOU):